

1 Amendments to the Claims:

2 This listing of claims will replace all prior versions, and
3 listings, of claims in the application using (Original) (Currently
4 Amended) (New) (Canceled) (Previously Presented) nomenclature, as
5 recited in the below listing of claims.

7 1. (Currently Amended) A hinge for positioning a left panel and a
8 right panel, the hinge comprising,

9 an inflatable bladder for encapsulating an inflation material,
10 a top film extending between the left and right panels and
11 encapsulating a curing resin, and

12 a bottom film extending between the left and right panels, the
13 top film and bottom film are circumferentially disposed about the
14 bladder, the top film having a top circumferential length, the
15 bottom film having a bottom circumferential length, the top and
16 bottom circumferential lengths for angularly positioning the left
17 and right panels as the inflatable bladder is inflated.

19 2. (Original) The hinge of claim 1 further comprising,

20 a flex circuit extending from the left panel and around the
21 bladder for electrically routing power from the left panel.

24 3. (Original) The hinge of claim 1 wherein,

25 the inflation material is a sublimation powder disposed in the
26 bladder for inflating the bladder.

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1 4. (Currently Amended) The hinge of claim 1 further comprising,
2 uncured resin disposed between the top and bottom films, the
3 uncured resin being cured by exposure to UV light, and
4 a reflective coating disposed on the bladder for reflective UV
5 light into the curing the uncured resin for curing the uncured
6 resin to rigidize the hinge to secure in position the top and
7 bottom film for permanently securing in position the left and right
8 panels.

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10 5. (Original) The hinge of claim 1 further comprising,
11 a left frame for securing the left panel to the top film and to
12 the bottom film and to the bladder, and
13 a right frame for securing the right panel to the top film and
14 to the bottom film and to the bladder.

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16 6. (Original) The hinge of claim 1 further comprising,
17 a left frame for supporting the left panel to the top film and
18 to the bottom film and to the bladder,
19 a left adhesive layer for securing the left frame to the left
20 panel and to the top film and to the bottom film and to the
21 bladder,
22 a right frame for supporting the right panel to the top film and
23 to the bottom film and to the bladder, and
24 a right adhesive layer for securing the right frame to the right
25 panel and to the top film and to the bottom film and to the
26 bladder.

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1 7. (Original) The hinge of claim 1 further comprising,
2 a flex circuit extending from the left panel and around the
3 bladder for electrically routing power from the left panel,
4 a plurality of ground pads disposed on the top and bottom films,
5 a plurality of extensions comprising conductive traces extending
6 from the flex circuit to the plurality of ground pads,
7 respectively, for distributively grounding the hinge.

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10 8. (Original) The hinge of claim 1 further comprising,
11 a flex circuit extending from the left panel and around the
12 bladder for electrically routing power from the left panel,
13 a plurality of ground pads disposed on the top and bottom films
14 and disposed on and under the left and right panels, and
15 a plurality of extensions comprising conductive traces extending
16 from the flex circuit to the plurality of ground pads,
17 respectively, for grounding the hinge.

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19 9. (Original) The hinge of claim 1 further comprising,
20 a flex circuit extending from the left panel and around the
21 bladder for electrically routing power from the left panel, the
22 left panel being a solar cell panel comprising a silver contact and
23 a thin film solar cell, the flex circuit comprising a conductor
24 trace connected the silver contact for routing power from the left
25 panel and around the bladder.

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1 10. (Currently Amended) The hinge of claim 1 wherein the curing
2 resin is cured by exposure to UV light, wherein the sun ejects
3 electrons producing static electrical charge and the sun emits UV
4 light exposing the hinge to UV light and static electrical charge,
5 the hinge further comprising,

6 uncured resin disposed between the top and bottom films, the
7 uncured resin being cured by exposure to UV light, and
8 a coating disposed over the top and bottom films for passing UV
9 light and for conducting static electrical charge, the coating
10 serving to discharge static electrical charge accumulating on the
11 coating, the UV light curing the uncured resin to rigidize the
12 hinge to secure in position the top and bottom film for permanently
13 securing in position the left and right panels.

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15 11. (Currently Amended) The hinge of claim 1 wherein the curing
16 resin is cured by exposure to UV light, the sun ejects electrons
17 producing static electrical charge and the sun emits UV light
18 exposing the hinge to UV light and static electrical charge and ,
19 the hinge further comprising,

20 uncured resin disposed between the top and bottom films, the
21 uncured resin being cured by exposure to the UV light, and
22 a transparent coating disposed over the hinge for passing UV
23 light and for conducting static electrical charge, the coating
24 comprising indium tin oxide and magnesium fluoride, the transparent
25 coating serving to discharge static electrical charge accumulating
26 on the transparent coating, the UV light curing the uncured resin
27 to rigidize the hinge to secure in position the top and bottom film
28 for permanently securing in position the left and right panels.

1 12. (Previously Presented) The hinge of claim 1 wherein the left
2 panel is a solar cell panel for providing power, the hinge further
3 comprising,

4 a flex circuit extending from the left panel and around the
5 bladder and comprising a trace conductor for electrically routing
6 power from the left panel having an electrical contact and around
7 the bladder, and

8 a wrap around contact for electrically connecting the electrical
9 contact and the trace conductor.

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11 13. (Currently Amended) A hinge for positioning a left panel and a
12 right panel, wherein the sun ejects electrical charge producing
13 static electrical charge and the sun emits UV light exposing the
14 hinge to UV light and static electrical charge, the hinge
15 comprising,

16 uncured resin,

17 a top film for encapsulating a curing the uncured resin, the
18 curing uncured resin being cured by exposure to UV light, the top
19 film having a top circumferential length for defining the a
20 position between the left and right panels, and

21 a coating disposed over the top film for passing the UV light
22 for curing the curing uncured resin and for static discharge
23 protection of the top film, the coating serving to discharge static
24 electrical charge accumulating on the coating, the UV light curing
25 the uncured resin to rigidize the hinge to secure in position the
26 top and bottom film for permanently securing in position the left
27 and right panels.

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1 14. (Currently Amended) The hinge of claim 13, the hinge further
2 comprising,

3 a bladder filled with a sublimation powdered for expanding the
4 bladder, and

5 a bottom film, the top film and bottom films are
6 circumferentially disposed about the bladder, the bottom film
7 having a bottom circumferential length, the top and bottom
8 circumferential length defining the position between the left and
9 right panels when the bladder has expanded.

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11 15. (Original) The hinge of claim 13, wherein,

12 the coating comprises indium tin oxide and magnesium fluoride.

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15 16. (Currently Amended) A hinge for positioning a left panel and a
16 right panel, where the sun emits UV light exposing the hinge to UV
17 light, the hinge comprising,

18 a curing uncured resin,

19 a top film coupled to the left and right panels and for
20 encapsulating the curing uncured resin, the curing uncured resin
21 being cured by exposure to the UV light, the top film having a top
22 circumferential length for defining an angular position between the
23 left and right panels, the UV light curing the uncured resin to
24 rigidize the hinge to secure in position the top film for
25 permanently securing in position the left and right panels.

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